

WHAT IS CLAIMED IS:

1 1. An apparatus for dispensing a flexible conduit used to monitor or treat a
2 physiological condition, the apparatus comprising:
3 a flexible conduit housing including:
4 a base for temporarily housing a flexible conduit, the base having an opening for
5 receiving the flexible conduit; and
6 a cover attached to the base for substantially closing the opening; and
7 an interface for mounting the flexible conduit housing; and
8 wherein the flexible conduit is dispensable with the flexible conduit housing to a fixable
9 variable length.

1 2. The apparatus of claim 1, wherein the physiological condition is diabetes.

1 3. The apparatus of claim 1, wherein the flexible conduit is connectable to an
2 infusion device.

1 4. The apparatus of claim 1, further comprising an infusion device, and wherein the
2 infusion device is connected to the flexible conduit to assist in dispensing a fluid.

1 5. The apparatus of claim 1, wherein the flexible conduit comprises medical tubing.

1 6. The apparatus of claim 1, wherein the flexible conduit comprises electrical cable.

1 7. The apparatus of claim 1, wherein the flexible conduit is connectable to a
2 medical sensor monitor.

1 8. The apparatus of claim 1, further comprising a medical sensor monitor, and
2 wherein the medical sensor monitor is connected to the flexible conduit to monitor an aspect of
3 the physiological condition.

1 9. The apparatus of claim 1, further including a replaceable cartridge for holding the
2 flexible conduit that is engageable to the base.

1 10. The apparatus of claim 9, wherein the replaceable cartridge includes a spool
2 cartridge and the flexible conduit is wound on the spool cartridge.

1 11. The apparatus of claim 9, wherein the replaceable cartridge includes a spool
2 including a hub for engaging the flexible conduit at an adjustable position along a total length of
3 the flexible conduit to adjust the fixable variable length.

1 12. The apparatus of claim 9, wherein the flexible conduit is simultaneously
2 dispensable from the replaceable cartridge from two ends.

1 13. The apparatus of claim 1, wherein the flexible conduit housing further includes a
2 spool for dispensing the flexible conduit to a fixable variable length.

1 14. The apparatus of claim 13, wherein the spool includes a hub for engaging the
2 flexible conduit at an adjustable position along a total length of the flexible conduit to adjust the
3 fixable variable length.

1 15. The apparatus of claim 13, wherein the spool includes a replaceable cartridge.

1 16. The apparatus of claim 13, wherein the two ends of the flexible conduit are
2 simultaneously dispensable from the spool.

1 17. The apparatus of claim 1, further comprising a lockable spring driven winder
2 mounted within the flexible conduit housing for dispensing the flexible conduit to the fixable
3 variable length.

1 18. The apparatus of claim 17, wherein the spring driven winder is lockable with a
2 friction retainer.

1 19. The apparatus of claim 17, wherein the spring driven winder is lockable with a
2 ratchet retainer.

1 20. The apparatus of claim 17, wherein the two ends of the flexible conduit are
2 simultaneously dispensable from the lockable spring driven winder.

1 21. The apparatus of claim 1, wherein the base and cover form a clamshell flexible
2 conduit housing.

1 22. The apparatus of claim 1, wherein the interface is coupleable to a device for
2 dispensing a fluid through the flexible conduit.

1 23. The apparatus of claim 1, wherein the interface is selected from a group
2 including a clip, a strap, a clamp and a tape.

1 24. An apparatus for storing a flexible conduit used to monitor or treat a
2 physiological condition, the apparatus comprising:
3 a flexible conduit housing;
4 a flexible conduit; and
5 a spool cartridge for holding the flexible conduit including a coupler for engaging the
6 spool cartridge into the flexible conduit housing, wherein the flexible conduit housing dispenses
7 the flexible conduit to a fixable variable length.

1 25. The apparatus of claim 24, wherein the physiological condition is diabetes.

1 26. The apparatus of claim 24, wherein the flexible conduit is connectable to an
2 infusion device.

1 27. The apparatus of claim 24, wherein the flexible conduit is medical tubing.

1 28. The apparatus of claim 24, wherein the flexible conduit is connectable to a
2 medical sensor monitor.

1 29. The apparatus of claim 24, wherein the flexible conduit is electrical cable.

1 30. The apparatus of claim 24, wherein the flexible conduit is wound on the spool
2 cartridge and two ends of the flexible conduit are simultaneously dispensable.

1 31. The apparatus of claim 24, wherein the spool cartridge includes a hub with a
2 passage for engaging the flexible conduit at an adjustable position along a total length of the
3 flexible conduit to adjust the fixable variable length.

1 32. The apparatus of claim 24, further comprising a lockable spring driven winder
2 for dispensing the flexible conduit to the fixable variable length.

1 33. The apparatus of claim 32, wherein the spring driven winder is lockable with a
2 friction retainer.

1 34. The apparatus of claim 32, wherein the spring driven winder is lockable with a
2 ratchet retainer.

1 35. A method of dispensing flexible conduit to assist in dispensing a fluid or
2 monitoring a physiological condition, the method comprising the steps of:
3 providing a flexible conduit housing including:
4 a base for temporarily housing a flexible conduit, the base having an opening for
5 receiving the flexible conduit; and
6 a cover attached to the base for substantially closing the opening; and
7 mounting the flexible conduit housing with an interface; and
8 dispensing the flexible conduit with the flexible conduit housing to a fixable variable
9 length.

1 36. The method of claim 35, wherein the fluid is insulin.

1 37. The method of claim 35, further comprising providing an infusion device; and
2 connecting the flexible conduit to the infusion device to assist in dispensing a fluid.

1 38. The method of claim 35, wherein the flexible conduit is connectable to an
2 infusion device.

1 39. The method of claim 35, wherein the flexible conduit is medical tubing.

1 40. The method of claim 35, further comprising providing a medical sensor monitor
2 and connecting the flexible conduit to a medical sensor monitor to assist in monitoring an aspect
3 of the physiological condition.

1 41. The method of claim 35, wherein the flexible conduit is connectable to a medical
2 sensor monitor.

1 42. The method of claim 35, wherein the flexible conduit is electrical cable.

1 43. The method of claim 35, further comprising providing a replaceable cartridge,
2 and wherein the base is engageable to the replaceable cartridge for holding the flexible conduit.

1 44. The method of claim 43, wherein the replaceable cartridge includes a spool
2 cartridge and the flexible conduit is wound on the spool cartridge.

1 45. The method of claim 43, wherein the replaceable cartridge includes a spool
2 having a hub for engaging the flexible conduit at an adjustable position along a total length of
3 the flexible conduit to adjust the fixable variable length.

1 46. The method of claim 43, wherein the flexible conduit is simultaneously
2 dispensable from the replaceable cartridge from two ends.

1 47. The method of claim 35, wherein the flexible conduit housing further includes a
2 spool for dispensing the flexible conduit to a fixable variable length.

1 48. The method of claim 47, wherein the spool includes a hub for engaging the
2 flexible conduit at an adjustable position along a total length of the flexible conduit to adjust the
3 fixable variable length.

1 49. The method of claim 47, wherein the spool includes a replaceable cartridge.

1 50. The method of claim 47, wherein the two ends of the flexible conduit are
2 simultaneously dispensable from the spool.

1 51. The method of claim 35, further comprising providing a lockable spring driven
2 winder mounted within the flexible conduit housing for dispensing the flexible conduit to the
3 fixable variable length.

1 52. The method of claim 51, wherein the spring driven winder is lockable with a
2 friction retainer.

1 53. The method of claim 51, wherein the spring driven winder is lockable with a
2 ratchet retainer.

1 54. The method of claim 51, wherein the two ends of the flexible conduit are
2 simultaneously dispensable from the lockable spring driven winder.

1 55. The method of claim 35, wherein the base and cover form a clamshell flexible
2 conduit housing.

1 56. The method of claim 35, wherein the interface is coupleable to a device for
2 dispensing a fluid through the flexible conduit.

1 57. The method of claim 35, wherein the interface is selected from a group including
2 a clip, a strap, a clamp and a tape.

1 58. A method of storing flexible conduit to assist in dispensing a fluid or monitoring
2 a physiological condition, the method comprising the steps of:
3 providing a flexible conduit housing;
4 providing a flexible conduit; and
5 holding the flexible conduit on a spool cartridge including a coupler for engaging the
6 spool cartridge into the flexible conduit housing, wherein the flexible conduit housing dispenses
7 the flexible conduit to a fixable variable length.

1 59. The method of claim 58, wherein the fluid is insulin.

1 60. The method of claim 58, wherein the flexible conduit is connectable to a medical
2 sensor monitor.

1 61. The method of claim 58, wherein the flexible conduit is connectable to an
2 infusion device.

1 62. The method of claim 58, wherein the flexible conduit is medical tubing.

1 63. The method of claim 58, wherein the flexible conduit is electrical cable.

1 64. The method of claim 58, wherein the flexible conduit is wound on the spool
2 cartridge and two ends of the flexible conduit are simultaneously dispensable.

1 65. The method of claim 58, wherein the spool cartridge includes a hub with a
2 passage for engaging the flexible conduit at an adjustable position along a total length of the
3 flexible conduit to adjust the fixable variable length.

1 66. The method of claim 58, further comprising providing a lockable spring driven
2 winder for dispensing the flexible conduit to the fixable variable length.

1 67. The method of claim 66, wherein the spring driven winder is lockable with a
2 friction retainer.

1 68. The method of claim 66, wherein the spring driven winder is lockable with a
2 ratchet retainer.

1 69. A method of dispensing a fluid, the method comprising the steps of:
2 providing a flexible conduit housing including:
3 a flexible conduit;
4 a base for temporarily housing the flexible conduit, the base having an opening
5 for receiving the flexible conduit; and
6 a cover attached to the base for substantially closing the opening; and
7 mounting the flexible conduit housing with an interface;
8 dispensing the flexible conduit with the flexible conduit housing to a fixable variable
9 length;
10 attaching a first end of the flexible conduit to an infusion device;
11 attaching a second end of the flexible conduit to an infusion set; and
12 dispensing the fluid from the infusion device through the flexible conduit to the infusion
13 set.

1 70. The method of claim 69, wherein the fluid is insulin.

1 71. The method of claim 69, wherein the flexible conduit is held on a replaceable
2 cartridge that is engaged to the base.

1 72. The method of claim 71, wherein the replaceable cartridge includes a spool
2 cartridge and wherein the flexible conduit is wound on the spool cartridge.

1 73. The method of claim 71, wherein the replaceable cartridge includes a spool
2 having a hub for engaging the flexible conduit at an adjustable position along a total length of
3 the flexible conduit to adjust the fixable variable length.

1 74. The method of claim 71, wherein the flexible conduit is simultaneously
2 dispensed from the replaceable cartridge from the first and second end.

1 75. The method of claim 69, wherein the flexible conduit housing further includes a
2 spool for dispensing the flexible conduit to a fixable variable length.

1 76. The method of claim 75, wherein the spool includes a hub for engaging the
2 flexible conduit at an adjustable position along a total length of the flexible conduit to adjust the
3 fixable variable length.

1 77. The method of claim 75, wherein the spool includes a replaceable cartridge.

1 78. The method of claim 75, wherein the first and second end of the flexible conduit
2 are simultaneously dispensed from the spool.

1 79. The method of claim 69, further comprising providing a lockable spring driven
2 winder mounted within the flexible conduit housing for dispensing the flexible conduit to the
3 fixable variable length.

1 80. The method of claim 79, wherein the spring driven winder is lockable with a
2 friction retainer.

1 81. The method of claim 79, wherein the spring driven winder is lockable with a
2 ratchet retainer.

1 82. The method of claim 79, wherein the first and second end of the flexible conduit
2 are simultaneously dispensed from the lockable spring driven winder.

1 83. The method of claim 69, wherein the base and cover form a clamshell flexible
2 conduit housing.

1 84. The method of claim 69, wherein the interface is coupleable to a housing of the
2 infusion pump.

1 85. The method of claim 69, wherein the interface is selected from a group including
2 a clip, a strap, a clamp and a tape.

1 86. A method of using a medical sensor, the method comprising the steps of:
2 providing a flexible conduit housing, including:
3 a flexible conduit;
4 a base for temporarily housing the flexible conduit, the base having an opening
5 for receiving the flexible conduit; and
6 a cover attached to the base for substantially closing the opening; and
7 mounting the flexible conduit housing with an interface;
8 dispensing the flexible conduit with the flexible conduit housing to a fixable variable
9 length;
10 attaching a first end of the flexible conduit to a medical sensor monitor;
11 attaching a second end of the flexible conduit to a medical sensor; and
12 receiving signals at the medical sensor monitor from the medical sensor through the
13 flexible conduit.

1 87. The method of claim 86, wherein the sensor is a glucose sensor.

1 88. The method of claim 86, wherein the flexible conduit is held on a replaceable
2 cartridge and engaged to the base.

1 89. The method of claim 88, wherein the replaceable cartridge includes a spool
2 cartridge and wherein the flexible conduit is wound on the spool cartridge.

1 90. The method of claim 88, wherein the replaceable cartridge includes a spool
2 having a hub for engaging the flexible conduit at an adjustable position along a total length of
3 the flexible conduit to adjust the fixable variable length.

1 91. The method of claim 88, wherein the flexible conduit is simultaneously
2 dispensed from the replaceable cartridge from the first and second end.

1 92. The method of claim 86, wherein the flexible conduit housing further includes a
2 spool for dispensing the flexible conduit to a fixable variable length.

1 93. The method of claim 92, wherein the spool comprises a hub for engaging the
2 flexible conduit at an adjustable position along a total length of the flexible conduit to adjust the
3 fixable variable length.

1 94. The method of claim 92, wherein the spool includes a replaceable cartridge.

1 95. The method of claim 92, wherein the first and second end of the flexible conduit
2 are simultaneously dispensed from the spool.

1 96. The method of claim 86, further comprising providing a lockable spring driven
2 winder mounted within the flexible conduit housing for dispensing the flexible conduit to the
3 fixable variable length.

1 97. The method of claim 96, wherein the spring driven winder is lockable with a
2 friction retainer.

1 98. The method of claim 96, wherein the spring driven winder is lockable with a
2 ratchet retainer.

1 99. The method of claim 96, wherein the first and second end of the flexible conduit
2 are simultaneously dispensed from the lockable spring driven winder.

1 100. The method of claim 86, wherein the base and cover form a clamshell flexible
2 conduit housing.

1 101. The method of claim 86, wherein the interface is coupleable to a housing of the
2 medical sensor monitor.

1 102. The method of claim 86, wherein the interface is selected from a group including
2 a clip, a strap, a clamp and a tape.